

## ABSTRACT

# NUCLEIC ACIDS, EXPRESSION VECTORS AND HOST CELLS FOR MAKING CHIMERIC NUCLEIC ACIDS AND METHODS FOR PRODUCING IMMOBILIZED POLYPEPTIDES

The present invention enables immobilization of a useful protein, for example, a glycosyltransferase, onto the surface of a yeast cell without deteriorating its enzyme activity. The present invention provides a fusion nucleic acid, expression vectors and host cells comprising these chimeric nucleic acids, and methods for making and using them. The chimeric nucleic acid is characterized by comprising a coding sequence encoding a useful protein bound to a yeast cell wall protein. In one aspect, it is downstream of a gene encoding the yeast cell wall protein. In one aspect, the host cell is a transformant yeast, which is transformed with the fusion gene expression vector that expressed an enzyme that is immobilized yeast cell wall.